

REMARKS

The present Amendment is in response to the Office Action mailed 4 September 2009. Claims 1-26 were pending. By this amendment, claims 1, 2, 4, 7, and 14-24 are cancelled, claims 3, 5, 6, 8, 13 are amended, and new claims 27 and 28 are added. Claims 3, 5, 6, 8-13, and 25-28 are now pending in view of the above amendments. Reconsideration of the application is respectfully requested in view of the above amendments to the claims and the following remarks.

A. ALLOWED AND ALLOWABLE SUBJECT MATTER

The Office Action indicated that claims 25 and 26 were allowed. The Office Action indicated that claim 5 would be allowable if re-written in independent form including all of the limitations of the base claim and any intervening claims. The Office Action indicated that claims 8-11 would be allowable if the rejections under 35 U.S.C. § 112, second paragraph, were addressed and if the claims were amended to include all of the limitations of the base claim and any intervening claims.

The Examiner's allowance of claims 25 and 26 is appreciated.

With respect to claim 5, claim 5 is amended herein to include all of the limitations of claim 1 and claim 4, from which as-filed claim 5 depended. Applicant respectfully submits that the scope of claim 5 has not been narrowed in any way so as to overcome any prior art, but has merely been rewritten in an independent format. As acknowledged by the Examiner, claim 5 is patentably distinct from the prior art, and is now in a condition for allowance.

With respect to claims 8-11, claim 8 is amended herein to include all of the limitations of claims 1, 2, and 7, from which as-filed claim 8 depended. In addition, as discussed below, claim 8 was amended herein to address the rejections under 25 U.S.C. § 112, second paragraph.

Applicant respectfully submits that the scope of claim 8 has not been narrowed in any way so as to overcome any prior art, but has merely been rewritten in an independent format. As acknowledged by the Examiner, claim 8 is patentably distinct from the prior art, and is now in a condition for allowance. Moreover, for at least the same reasons, claims now depending from claim 8 (i.e., claims 3, 6, and 9-13) are also in a condition for allowance.

B. NEWLY ADDED CLAIMS

Applicant respectfully submits that newly added claims 27 and 28, which depend from claim 8, are allowable for at least the same reasons that claim 8 was indicated to be allowable. Consideration and allowance of claims 27 and 28 is respectfully requested.

C. CLAIM OBJECTIONS

The Office Action objected to claim 1 because the word scrap was inadvertently misspelled "scrape." Claim 1 has been canceled herein and the elements of claim 1 have been incorporated into claims 5 and 8 with the appropriate corrections.

D. REJECTION UNDER 35 U.S.C. § 112, SECOND PARAGRAPH

The Office Action rejected claims 8-11 under 35 U.S.C. § 112, second paragraph as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. In particular, the Examiner noted that there is insufficient antecedent basis for the term "the EAF slag" and it was unclear what slag the term "the EAF slag" was referring to.

In response, claim 8 is amended herein to recite, in part, "fluxing the oxidized scrap after it is impacted using a slag selected from the group consisting of Na₂O-B₂O₃-SiO₂-based slags, a

modified electric arc furnace slag based on $\text{CaO-SiO}_2\text{-B}_2\text{O}_3$, and combinations thereof at temperatures below the melting point of steel, wherein the melting point of the slag is lowered by mixing an additive with the slag." Applicant respectfully submits that the amended claim is clear and that the "fluxing" is performed with "a slag" and that the melting temperature of "the slag is lowered by mixing an additive with the slag."

E. PRIOR ART REJECTIONS

I. REJECTION UNDER 35 U.S.C. §102

The Office Action rejected claims 1, 6, and 15 under 35 U.S.C. § 102(b). Claims 1 and 15 are canceled herein, thus mooted this rejection. As discussed with respect to the Allowed and Allowable Subject Matter, Applicant respectfully submits that claim 6 has been amended herein to depend from an allowable base claim and is thus allowable for at least the same reasons that the base claim is allowable.

II. REJECTION UNDER 35 U.S.C. § 103

The Office Action rejected claims 2, 3, 4, 6, 7, 12-14, 16, 23, and 24 under 35 U.S.C. § 103(a). Claims 2, 4, 7, 14, 16, 23, and 24 are canceled herein, thus mooted this rejection. As discussed with respect to the Allowed and Allowable Subject Matter, Applicant respectfully submits that claims 3, 6, 12, and 13 have been amended herein to depend from an allowable base claim and are thus allowable for at least the same reasons that the base claim is allowable.

F. SUMMARY

In summary, claims 3, 5, 6, 8-13, and 25-28 are now pending in view of the above amendments, and Applicant respectfully submits that all of the pending claims are patentably distinct from the art of record. Allowance of each of these claims is respectfully requested.

G. CONCLUSION

In view of the foregoing, Applicants respectfully request favorable reconsideration and allowance of the present claims. In the event the Examiner finds any remaining impediment to the prompt allowance of this application which could be clarified by a telephone interview, the Examiner is respectfully requested to contact the undersigned attorney.

The Commissioner is hereby authorized to charge payment of any of the following fees that may be applicable to this communication, or credit any overpayment, to **Deposit Account No. 23-3178**: (1) any filing fees required under 37 CFR § 1.16; (2) any patent application and reexamination processing fees under 37 CFR § 1.17; and/or (3) any post issuance fees under 37 CFR § 1.20. In addition, if any additional extension of time is required, which has not otherwise been requested, please consider this a petition therefore and charge any additional fees that may be required to **Deposit Account No. 23-3178**.

Dated this 24th day of November, 2009.

Respectfully submitted,

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